

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

What is Claimed is:

1. (Currently amended) Gas chromatograph for the analysis of a sample, having a feed arrangement [(3-6)] for feeding the sample, an open tubular capillary column [(2)] for separating the components of the sample, temperature control means [(8-15)] for controlling the temperature of the column [(2)], and a detector [(1)] for detecting the separated components of the sample, wherein said column [(2)] comprises a bundle of open tubular capillaries, characterized in that said open tubular capillaries [(16)] have gas permeable walls comprising a polymer membrane [(19)].
2. (Currently amended) Gas chromatograph according to claim 1, characterized in that [[it]] the gas chromatograph is a hand-held portable gas chromatograph.
3. (Currently amended) Gas chromatograph according to claim [[3]] 1 characterized in that said [[wall]] walls [[has]] have an inner layer of a selectively gas permeable polymer membrane [(19)] and an outer layer of a porous polymer support [(18)].
4. (Currently amended) Gas chromatograph according to claim 1 characterized in that said

bundle has between 10 and 10000 pieces of open tubular capillaries [(16)].

5. (Currently amended) Gas chromatograph according to claim 1, characterized in that said open tubular capillaries [(16)] have a length of 10 to 100 cm and an inner diameter of 10 to 1000 μm .

6. (Currently amended) Gas chromatograph according to claim 1, characterized in that said bundle contains 100 to 4000 pieces of said open tubular capillaries [(16)].

7. (Currently amended) Gas chromatograph according to claim 1, characterized in that the inner diameter of the tubular capillaries [(16)] is from 50 to 1000 μm .

8. (Currently amended) Gas chromatograph according to claim 1, characterized in that said open tubular capillaries [(16)] have open space between them.

9. (Currently amended) Gas chromatograph according to claim 1, characterized in that said column [(2)] has a cover [(10, 14)] surrounding said bundle.

10. (Currently amended) Gas chromatograph according to claim 8, characterized in that said temperature control means [(8-15)] include a heating medium [(9)] arranged to flow [(11)] through said open space between said capillaries [(16)].

11. (Currently amended) Gas chromatograph according to claim 10, characterized in that said temperature control means [(8-15)] include said cover [(14)] which is made of heat insulating material and has inlet and outlet openings [(8)] for allowing said heating medium [(9)] to

flow through said open space between said capillaries [(16)].

12. (Currently amended) Gas chromatograph according to claim [(1)] 10, characterized in that said temperature control means [(8-15)] include a thermostat heater [(13)] for controlling the temperature of said heating medium [(9)].

13. (Currently amended) Gas chromatograph according to claim 12, characterized in that said temperature control means [(8-15)] include a pump [(12)] and a hose or tube [(15)] for pumping and conveying said heating medium [(9)] between said thermostat heater [(13)] and the open space between said capillaries [(16)].

14. (Currently amended) Gas chromatograph according to claim 1, characterized in that said feed arrangement [(3-6)] comprises a filter [(3)] for absorbing vapour from the sample before it enters the column [(2)].

15. (Currently amended) Gas chromatograph according to claim 1, characterized in that said feed arrangement [(3-6)] comprises a gas inlet [(5)] for letting the sample into said column [(2)].

16. (Currently amended) Gas chromatograph according to claim 14, characterized in that said feed arrangement [(3-6)] comprises a valve [(4)] for directly directing the sample to said column (2) ~~alternatively directly~~ or alternatively through said filter [(3)].

17. (Currently amended) Gas chromatograph according to claim 1, characterized in that said feed arrangement [(3-6)] comprises a valve [(6)] for directing the sample through said column [(2)] or alternatively directly to said detector [(1)].

18. (Currently amended) Gas chromatograph according to claim 1, characterized in that said detector [(1)] is an ion mobility spectrometer (IMS).

19. (Currently amended) Gas chromatograph according to claim 18, characterized in that the ion mobility spectrometer [(IMS)] is a hyphenated multisensor ion mobility spectrometer [(IMS)] designed for direct flow-through of the sample.

20. (Currently amended) Gas chromatograph according to claim 19, characterized in that said detector [(1)] employs semiconductor sensors, electroacoustic gas sensors or sensor arrays thereof, or humidity and temperature sensors, or a combination of any of those, in which case at least one sensor is said ion mobility spectrometer [(IMS)].

21. (Cancelled)

22. (Previously presented) Gas chromatograph according to claim 1, characterized in that said gas chromatograph is a portable and/or hand-held gas analyzer.